

### Blood Glandular

**Relation of Muscle Hemoglobin to Blood Hemoglobin.**—The question of the identity or nonidentity of muscle hemoglobin and blood hemoglobin has been the subject of physiological speculation and experimentation for over a century, and is possibly a question of considerable clinical significance.

A hundred years ago, it was assumed that there was a free interchange of coloring matter between the muscle fibers and the erythrocytes, that is, that the hemoglobins in the two structures were chemically identical. About fifty years ago, however, it was found that perfusion did not wash out the hemoglobin from muscle, which led to the opposite conclusion, that is, that the two hemoglobins were chemically distinct. The term pseudo-hemoglobin was, therefore, introduced. A few decades later, however, modern biochemical methods again reversed this conclusion, the accumulated chemical data showing an apparent identity. Spectroscopic records, for example, were almost indistinguishable.

A third reversal of conclusion has just come from the application of serological methods. Hektoen and his coworkers<sup>1</sup> have immunized rabbits against the two hemoglobins (dog) and have obtained precipitating sera with which the two hemoglobins can be sharply differentiated.

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#### REFERENCES

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### Dermatology

**The Relationship Between Herpes Zoster and Varicella.**—There has recently been considerable discussion pro and con, in regard to the alleged relationship between the etiologic agents of herpes zoster and varicella. During the last ten years many instances have been reported of varicella having been contracted from patients suffering with herpes zoster and vice versa. These reports have become so common that one might be tempted to accept a relationship between the two diseases. However, this "*post hoc, ergo propter hoc*" type of reasoning should not be accepted in this instance because of the common occurrence of the two diseases. The alleged relationship may be due to coincidence rather than to any similarity between the causative factors.

The most striking cases recently reported are those by the Shelmires.<sup>1</sup> A father, age fifty-two, developed a severe typical gangrenous herpes zoster of the right side of the face and tongue. Nine days later he developed a generalized eruption which was characteristic of varicella. Seventeen days following the onset of the herpes zoster, his daughter, age twenty-seven, developed clinically typical varicella. She had never had chicken-

pox as a child nor had she been in contact with children or varicella recently.

Certain laboratory findings tend to indicate a relationship between zoster and varicella. Acidophylic intranuclear inclusion bodies are found in the lesions in both diseases.<sup>2</sup> Positive cross-complement fixation tests speak in favor of some relationship between the two diseases.<sup>3</sup> One experimenter claims to have succeeded in producing varicella in seventeen out of twenty-eight children inoculated intradermally with the fluid from the vesicles of zoster. Children who had had varicella proved immune to the inoculated zoster virus, while those who developed a varicellous eruption therefrom were later found to be immune to chickenpox.<sup>4</sup>

While the above clinical and laboratory findings are by no means conclusive, they are sufficiently suggestive to warrant the statement that the theory of a relationship between varicella and herpes zoster is worthy of serious consideration.

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#### REFERENCES

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3. Netter, A., and Urbain, A.: *The Relation Between Herpes Zoster and Varicella*, *Compt. rend. Soc. de Biol.*, 94:98, January, 1926.
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**Success With Mongoloid Idiots Reported.**—Mongoloid idiots—those baffling cases of defective children that look like flat-faced Oriental dolls—may be reclaimed from their smiling, contented state of idiocy and in some cases they may even reach practically normal intelligence. This was the encouraging report made by Dr. Walter Timme, of New York, before the American Association for the Study of the Feeble-minded.

The cause of Mongolism, and how to treat it, are still uncertain, though it is generally recognized as a gland disorder. Doctor Timme described his theory, which traces many of the symptoms of Mongolism to faulty development or lack of development of the fore section of the pituitary gland.

Working on this theory, Doctor Timme stated that he has been feeding Mongoloid patients pituitary substance, both of the whole gland and particularly of the fore lobe of the gland. Hypodermic injections of the gland solution have also been given, and in addition the patients have been given the usual thyroid treatment.

"As a result of ten years of this work, I have brought many of my Mongoloid patients to much higher levels than we have heretofore been able to do," he said.

Some of these children, who had started in life with the prospect of remaining idiots, unable to dress themselves, talk properly, or even eat like normal children, learned to do arithmetic up to multiplication by three or more figures and long division. They also learned to write letters and do oral arithmetic, which is remarkable achievement for these cases.

One of the patients, described by Doctor Timme, has attained an intelligence quotient of 90, which brings this child up to average intelligence.

Not all of the children treated have attained this degree of improvement, but Doctor Timme declared that "we have with these means accomplished more than by any previously known treatment, so far as I am aware."—*Bull. Wayne County Medical Society*.